

DWG. SCALE: 1



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NOTES:

1. THIS IS AN ULTRA-HIGH COMPONENT (UHV).
2. WHEN MACHINING VACUUM PARTS, USE OF SILICONES AND SULPHUR-BASED CUTTING FLUIDS IS PROHIBITED. USE ONE OF THE FOLLOWING:
 - A) CIMCOOL 5 STAR 49
 - B) TRIM SOL
3. THE COMPONENT NEEDS TO GO THROUGH A MULTIPLE STEP CLEANING PROCESS INVOLVING DEGREASING, WASHING, AND DRY NITROGEN BLOWDOWN. THE CHAMFER VACUUM SIDE SURFACE ROUGHNESS SHALL BE BETTER THAN 63 MICROINCH RMS.
4. THE COMPONENT SHALL BE LEAK TESTED USING A MASS SPECTROMETER WITH MINIMUM SENSITIVITY FOR HELIUM OF 2×10^{-10} STANDARD CC/SEC PER LEAK METER DIVISION, SUCH AS:
 - ALCATEL ASM-110TCL
 - VARIAN NCR 925 OR 936
 - VEECO MS-90, MS-90 OR MS-18
 - DUPONT CEC 24-120B

CALIBRATION OF THE LEAK DETECTOR SENSITIVITY SHALL BE PERFORMED JUST PRIOR TO TESTING.

FINAL TESTING WILL CONSIST OF SURROUNDING THE ASSEMBLY (BAGGING) WITH HELIUM. THE ASSEMBLY WILL BE REJECTED IF A 2% DEFLECTION IN THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.

5. KEEP THE PART CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.
6. CERTIFICATION OF ULTRASONIC TEST AND VACUUM EXAMINATION SHALL BE SIGNED BY A CONTRACTOR REPRESENTATIVE TO SIGN SUCH CERTIFICATIONS.
7. TOLERANCE SPECIFICATIONS TO CONFORM TO TOLERANCE BLOCK.
8. STAINLESS STEEL MATERIAL SHALL BE TOTALLY REMOVED IN THIS AREA ON BOTH SURFACE.
9. DIMENSIONS IN [] ARE MILLIMETERS AND ARE FOR REFERENCE ONLY.

ITEM	DWG PART NUMBER	NOMENCLATURE OR DESCRIPTION			MATERIAL / SPEC		QTY
		PART LIST		THE DRAWING IS THE PROPERTY OF			
UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES		LOG NUMBER		ARGONNE NATIONAL LABORATORY			
TOLERANCES		A45577800					
DECIMALS		ANGULAR					
X - .03		.015					
XX - .01		.010					
XXX - .005							
SURFACE ROUGHNESS		12.5					
REMOVE ALL BURRS AND BREAK SHARP EDGES (3 MAX.)							
SURFACE TREATMENT TO BE IN ACCORDANCE WITH LATEST AND BEL 1							
DIMENSIONING & TOLERANCING IN ACCORDANCE WITH LATEST AND BEL 2							
9/96		DATE		SCALE		SIZE	
DATE		11/18/87		1:1		D	
DO NOT SCALE DRAWING		SHEET		1:1		P41050914007-410001-00	